

CLAIMS

Claim 1. (Currently Amended) An apparatus for generating Oxygen, comprising:

a vessel;

a humidifier at least configured to be in communication with the vessel for the transfer of fluid directly or indirectly between the humidifier and vessel; and

an aqueous, Oxygen producing solution contained in the vessel, ~~wherein a resulting waste solution is at least non-toxic and wherein the resulting waste solution is at least not an environmental hazard.~~

Claim 2. (Currently Amended) The apparatus of Claim 1, wherein the aqueous, Oxygen producing solution further comprises a reactant dissolved in water, the reactant selected from the group consisting of Sodium Percarbonate ($2\text{Na}_2\text{CO}_3 \bullet 3\text{H}_2\text{O}_2$) or Sodium Perborate (NaBHO_3) ~~dissolved in water.~~

Claim 3. (Currently Amended) The apparatus of Claim 1 or 2, wherein the aqueous, Oxygen producing solution further comprises a ~~water-soluble~~ catalyst, wherein the ~~water-soluble~~ catalyst is at least non-toxic, at least not an environmental hazard, at least not an explosive hazard, at least not a fire hazard, and at least having a long shelf-life.

Claim 4. (Currently Amended) The apparatus of Claim[[s]] 1, wherein the aqueous, Oxygen producing solution further comprises a catalyst [[of]]comprising Manganese Dioxide (MnO_2) ~~and Sodium Carbonate (Na_2CO_3).~~

Claim 5. (Currently Amended) The apparatus of Claim[[s]] 3, wherein the ~~water-soluble~~-catalyst further comprises a mixture of Manganese Dioxide (MnO_2) and Sodium Carbonate (Na_2CO_3).

Claim 6. (Currently Amended) The apparatus of Claim[[s]] 1, wherein the aqueous, Oxygen producing solution further comprises a catalyst, and wherein the catalyst further comprises a [[of]] metal oxide.

Claim 7. (Currently Amended) The apparatus of Claim[[s]] 3, wherein the ~~water-soluble~~-catalyst further comprises a metal oxide.

Claim 8. (Canceled)

Claim 9. (Currently Amended) The apparatus of Claim [[8]]1, wherein the apparatus further comprises a ~~carrier tube~~fluid transfer member at least configured to ~~be attached~~allow the transfer of fluid between the vessel and the humidifier.

Claim 10. (Currently Amended) An apparatus for generating Oxygen, comprising:

a vessel for[[to]] at least containing an aqueous reaction;

a humidifier at least configured to be in fluid communication with the vessel; and

a water-soluble reactant to at least be used as an Oxygen producing reactant in the aqueous reaction, ~~wherein the water-soluble reactant is at least be non-toxic, at least not an environmental hazard, at least not an explosive hazard, at least not a fire hazard, and at least having long shelf life.~~

Claim 11. (Original) The apparatus of Claim 10, wherein the water-soluble reactant further comprises a reactant selected from the group consisting of Sodium Percarbonate ($2\text{Na}_2\text{CO}_3 \bullet 3\text{H}_2\text{O}_2$) or Sodium Perborate (NaBHO_3) dissolved in water.

Claim 12. (Currently Amended) The apparatus of Claim 10 or 11, wherein the apparatus further comprises a ~~water-soluble~~ catalyst, wherein the ~~water-soluble~~ catalyst is at least non-toxic, at least not an environmental hazard, at least not an explosive hazard, at least not a fire hazard, and at least having long shelf-life.

Claim 13. (Currently Amended) The apparatus of Claim[[s]] 10, wherein the apparatus further comprises a catalyst ~~[[of]]comprising~~ Manganese Dioxide (MnO_2) ~~and Sodium Carbonate~~ (Na_2CO_3).

Claim 14. (Currently Amended) The apparatus of Claim[[s]] 12, wherein the ~~water-soluble~~ catalyst ~~further~~ comprises a mixture of Manganese Dioxide (MnO_2) and Sodium Carbonate (Na_2CO_3).

Claim 15. (Currently Amended) The apparatus of Claim[[s]] 10, wherein the apparatus further comprises a catalyst comprising a[[of]] metal oxide.

Claim 16. (Currently Amended) The apparatus of Claim[[s]] 12, wherein the ~~water-soluble~~ catalyst further comprises a metal oxide.

Claim 17. (Canceled)

Claim 18. (Currently Amended) The apparatus of Claim ~~[[17]]~~10, wherein the apparatus further comprises a ~~carrier tube~~duct member at least configured to ~~be attached~~transport fluid along at least a portion of a path directly or indirectly extending between the vessel and the humidifier.

Claim 19. (Currently Amended) An apparatus for generating Oxygen, comprising:

a vessel to at least contain an aqueous reaction;

a humidifier at least configured to be in fluid communication with the vessel;

a water-soluble powder or liquid at least to be used as a reactant in the aqueous reaction;
~~wherein the water-soluble powder is at least non-toxic, at least not an environmental hazard, at least not an explosive hazard, at least not a fire hazard, and at least having a long shelf life; and~~

~~a water-soluble catalyst, wherein the water-soluble powder is at least non-toxic, at least not an environmental hazard, at least not an explosive hazard, at least not a fire hazard, and at least having a long shelf life.~~

Claim 20. (Original) The apparatus of Claim 19, wherein the water-soluble powder or liquid further comprises a reactant selected from the group consisting of Sodium Percarbonate ($2\text{Na}_2\text{CO}_3 \bullet 3\text{H}_2\text{O}_2$) or Sodium Perborate (NaBHO_3) dissolved in water.

Claim 21. (Canceled).

Claim 22. (Currently Amended) The apparatus of Claim ~~[[s]]~~ 19, wherein the ~~water-soluble catalyst further comprises a catalyst of~~ Manganese Dioxide (MnO_2) ~~and Sodium Carbonate (Na_2CO_3).~~

Claim 23. (Currently Amended) The apparatus of Claim[[s 21]] 20, wherein the ~~water-soluble~~ catalyst ~~further~~ comprises a mixture of Manganese Dioxide (MnO_2) and Sodium Carbonate (Na_2CO_3).

Claim 24. (Currently Amended) The apparatus of Claim[[s]] 19, wherein ~~the water-soluble~~ catalyst ~~further~~ comprises a ~~catalyst~~ of metal oxide.

Claim 25. (Currently Amended) The apparatus of Claim[[s 21]] 20, wherein the ~~water-soluble~~ catalyst ~~further~~ comprises a metal oxide.

Claim 26. (Canceled)

Claim 27. (Currently Amended) The apparatus of Claim [[26]]19, wherein the apparatus further comprises a ~~carrier tube~~fluid conveyance system at least configured to ~~be attached~~transport fluid along at least a portion of a path extending between the vessel and the humidifier.

Claim 28. (Currently Amended) A method for operating an Oxygen producing generator, comprising:

filling a vessel with water, wherein the vessel is in fluid communication with a humidifier;

dissolving in at least a portion of the water a water-soluble powder or liquid at least used as a Oxygen producing reactant, thereby producing a solution generating Oxygen ~~wherein the water~~

~~soluble powder is at least non-toxic, at least not an environmental hazard, at least not an explosive hazard, at least not a fire hazard, and at least having a long shelf life; and~~

directing at least a portion of the Oxygen within the vessel to the humidifier.

Claim 29. (Currently Amended) The method of Claim 28, wherein [[a]]the method further comprises:

~~dissolving a water-soluble~~ introducing a catalyst into at least a portion of the solution after the water-soluble powder is dissolved, wherein the ~~catalyst~~ water-soluble powder is at least non-toxic, at least not an environmental hazard, at least not an explosive hazard, at least not a fire hazard, and at least having a long shelf-life.

Claim 30. (Currently Amended) The method of Claim 28, wherein [[a]]the method further comprises:

~~dissolving a water-soluble~~ introducing a catalyst into at least a portion of the solution simultaneously with the water-soluble powder, wherein the ~~catalyst~~ water-soluble powder is at least non-toxic, at least not an environmental hazard, at least configured not an explosive hazard, at least not a fire hazard, and at least having long shelf-life.

Claim 31. (New) The apparatus of Claim 4, wherein the catalyst comprises Sodium Carbonate (Na_2CO_3).

Claim 32. (New) The apparatus of Claim 13, wherein the catalyst comprises Sodium Carbonate (Na_2CO_3).

Claim 33. (New) The apparatus of Claim 22, wherein the catalyst further comprises Sodium Carbonate (Na_2CO_3).